INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

December 5, 2003

TO: Interested Parties / Applicant

RE: A.E. Staley / 157-16882-00033

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03

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December 5, 2003

Mr. Timothy A. Bauer
A.E. Staley Manufacturing Company - South Plant
2200 E. Eldorado Street
Decatur, IL 62521

Re: Significant Source Modification No:
157-16882-00033

Dear Mr. Bauer:

A.E. Staley Manufacturing Company - South Plant applied for a Part 70 operating permit on May 31, 1996 for a corn wet milling facility. An application to modify the source was received on March 6, 2003. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

(a) One (1) gluten loadout baghouse, identified as LA-21B, constructed in 2004, controlling the emissions from the existing gluten loadout bin, and exhausting through stack #9.

(b) Three (3) pellet coolers, identified as coolers #1, #4, and #5, constructed in 2004, controlled by cyclones LA-79, LA-80, LA-81, and exhausting through stacks #58, #59, and #60, respectively.

(c) One (1) feed dump aspiration system, constructed in 2004, controlled by baghouse LA-83, and exhausting through stack #62.

The source also requested to revise the PM and PM10 emission limits for the existing units LA-63, LA-64, and LA-77, and to remove the existing units LA-19, LA-20, LA-23, LA-24, LA-49, and LA-59.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3).

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Tippecanoe County
U.S. EPA, Region V
Tippecanoe County Health Department
Air Compliance Section Inspector - Wanda Stanfield
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner
Title V File - T157-6008-00033
Title V Reviewer - ERG/BS

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PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

A.E. Staley Manufacturing Company - South Plant
3300 U.S. 52 South
Lafayette, Indiana 47905

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Significant Source Modification No.: 157-16882-00033	
Issued by: **Original signed by** Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: **December 5, 2003**

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary corn wet milling plant.

Responsible Official:	Plant Manager
Source Address:	3300 U.S. 52 South, Lafayette, Indiana 47905
Mailing Address:	2200 E. Eldorado Street, Decatur, Illinois 62521
Source Phone Number:	(765) 474-5474
SIC Code:	2046
County Location:	Tippecanoe
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Major Source, Section 112 of the Clean Air Act One of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) gluten loadout baghouse, identified as LA-21B, constructed in 2004, controlling the emissions from the existing gluten loadout bin, and exhausting through stack #9.

(b) One (1) combo pellet cooler (was pellet cooler #2 before), constructed in 1999, controlled by cyclone LA-63, and exhausting through stack #42.

(c) One (1) pellet storage bin, constructed in 1995, controlled by an integral baghouse LA-64, and exhausting through stack #43.

(d) One (1) hammermill aspiration operation, constructed in 2000, controlled by web scrubber LA-77, and exhausting through stack #54.

(e) Three (3) pellet coolers, identified as coolers #1, #4, and #5, constructed in 2004, controlled by cyclones LA-79, LA-80, LA-81, and exhausting through stacks #58, #59, and #60, respectively.

(f) One (1) feed dump aspiration system, constructed in 2004, controlled by baghouse LA-83, and exhausting through stack #62.

[Note: The maximum throughput rate information of the units included in this Significant Source Modification is treated as confidential information.]

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [40 CFR 124]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-2-8]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.

(2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

(3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is

issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63 , such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan (or Parametric Monitoring and SSM Plan) shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.14 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the

Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

(d) The Permittee may agree to follow an alternative set of compliance procedures other than those set out in (a) and (b) above, if it and IDEM, OAQ, agree to a different schedule of activities to address any noncompliant situation.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) One (1) gluten loadout baghouse, identified as LA-21B, constructed in 2004, controlling the emissions from the existing gluten loadout bin, and exhausting through stack #9.

(b) One (1) combo pellet cooler (was pellet cooler #2 before), constructed in 1999, controlled by cyclone LA-63, and exhausting through stack #42.

(c) One (1) pellet storage bin, constructed in 1995, controlled by an integral baghouse LA-64, and exhausting through stack #43.

(d) One (1) hammermill aspiration operation, constructed in 2000, controlled by web scrubber LA-77, and exhausting through stack #54.

(e) Three (3) pellet coolers, identified as coolers #1, #4, and #5, constructed in 2004, controlled by cyclones LA-79, LA-80, LA-81, and exhausting through stacks #58, #59, and #60, respectively.

(f) One (1) feed dump aspiration system, constructed in 2004, controlled by baghouse LA-83, and exhausting through stack #62.

[Note: The maximum throughput rate information of the units included in this Significant Source Modification is treated as confidential.]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Modification Limits [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (PSD):

(a) The PM and PM10 emissions from units LA-21B, LA-63, LA-64, LA-77, LA-79 through LA-83 shall not exceed the emissions limits listed in the table below:

Unit ID	PM10 Emission Limit (lbs/hr)	PM Emission Limit (lbs/hr)
LA-21B	0.26	0.26
LA-63	3.00	3.00
LA-64	1.29	1.29
LA-77	1.03	1.03
LA-79	1.71	1.71
LA-80	1.71	1.71
LA-81	1.71	1.71
LA-83	1.03	1.03

(b) The Permittee shall remove or shut down units LA-19, LA-20, LA-23, LA24, LA-49, and LA-59.

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the units in this modification shall be limited to less than the emission limits listed in the table below:

Unit	Unit ID	*Process Weight Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Gluten Loadout Baghouse	LA-21B	Greater than 6,000	8.56
Combo Pellet Cooler	LA-63	Greater than 22,000	20.4
Pellet Storage	LA-64	Greater than 5,000	7.58
Hammermill Aspiration Operation	LA-77	Greater than 31,000	25.7
Pellet Cooler #1	LA-79	Greater than 11,000	12.8
Pellet Cooler #4	LA-80	Greater than 11,000	12.8
Pellet Cooler #5	LA-81	Greater than 11,000	12.8
Feed Dump Aspiration System	LA-83	Greater than 50,000	35.4

*Note: The actual maximum process weight rate information for these units is confidential. The source agreed to accept the particulate emission limits calculated using the alternative process weight rates listed in the table above, which are lower than the actual process weight rates of these units.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.4 PM and PM10 Control

In order to comply with Conditions D.1.1(a) and D.1.2, the cyclones (LA-63, LA-79, LA-80, and LA-81), the baghouses (LA-21B, LA-64, and LA-83), and the scrubber (LA-77) for particulate control shall be in operation and control emissions from the gluten loadout bin, the pellet coolers, the pellet storage bin, the feed dump aspiration system, and the hammermill aspiration system at all times that these units are in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to SSM #157-11449-00033, issued on August 16, 2000, within 60 days after achieving maximum production rate, but not later than 180 days after the initial start up of pellet cooler LA-63, the Permittee shall perform PM testing for pellet cooler LA-63 utilizing EPA methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of stack exhausts from stacks #9, #42, #43, #58 through #60 and #62 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of stack exhaust from stack #54 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(f) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

(a) The Permittee shall monitor and record the pressure drop and flow rate of the scrubber LA-77, at least once per shift when the associated hammermill aspiration system is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 1.5 and 3.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of the scrubber is less than the normal minimum of 25 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or at a frequency recommended by the manufacturer.

D.1.8 Cyclone Inspections

(a) An inspection shall be performed at least once per year for all cyclones controlling the pellet coolers (LA-63, LA-79, LA-80, and LA-81). Inspections required by this condition shall be at least six (6) months apart.

(b) Inspections shall also be performed whenever the respective cyclone is out of service for more than 24 consecutive hours.

D.1.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.10 Baghouse Inspections

(a) An inspection shall be performed at least once per year for all bags controlling the gluten loadout bin, the pellet storage bin, and the feed dump aspiration (LA-21B, LA-64, and LA-83). Inspections required by this condition shall be performed at least six (6) months apart. All defective bags shall be replaced.

(b) Inspections shall also be performed whenever the respective baghouse is out of service for more than 24 consecutive hours. All defective bags shall be replaced.

D.1.11 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

D.1.12 Scrubber Inspections

An inspection shall be performed each calendar quarter of each scrubber controlling the hammermill aspiration system (LA-77). Inspections required by this condition shall not be performed in consecutive months.

D.1.13 Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 Record Keeping Requirements

(a) To document compliance with Condition D.1.6(a), the Permittee shall maintain once per day records of visible emission notations of the stack exhausts from stacks #42, #43, #58 through #62.

(b) To document compliance with Condition D.1.6(b), the Permittee shall maintain once per shift records of visible emission notations of the stack exhaust from stack #54.

(c) To document compliance with Condition D.1.7(a), the Permittee shall maintain once per shift records of the following parameters across scrubber LA-77:

(A) pressure drop; and

(B) flow rate.

(d) To document compliance with Conditions D.1.8, D.1.10, and D.1.12, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.8, D.1.10, and D.1.12.

(e) To document compliance with Condition D.1.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name:	A.E. Staley Manufacturing Company - South Plant
Source Address:	3300 U.S. 52 South, Lafayette, Indiana 47905
Mailing Address:	2200 E. Eldorado Street, Decatur, Illinois 62521
Source Modification No.:	157-16882-00033

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Issued December 5, 2003

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document
for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	A.E. Staley Manufacturing Company - South Plant
Source Location:	3300 U.S. 52 South, Lafayette, Indiana 47905
County:	Tippecanoe
SIC Code:	2046
Operation Permit No.:	157-6008-00033
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	157-16882-00033
Permit Reviewer:	ERG/YC

On September 29, 2003, the Office of Air Quality (OAQ) had a notice published in the Journal and Courier, Lafayette, Indiana, stating that A.E. Staley Manufacturing Company had applied for a Part 70 Significant Source Modification to expand the existing corn gluten feed pellet operation with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 18, 2003, Mr. Dorothy J. Ross (referred to as "the commenter") submitted comments on the proposed Part 70 Significant Source Modification. On October 21, 2003, A.E. Staley Manufacturing Company - South Plant (referred to as "the source") submitted comments on the proposed Part 70 Significant Source Modification. The summary of the comments is below. Language with a line through it below, has been deleted, bolded language has been added.

Comment 1:

The source requested to revise the stack test condition (Condition D.1.5) from "within 60 days after the initial start up" to "within 180 days after initial start up". The source stated that the pellet cooler might not be able to reach the maximum production within the time frame proposed in the draft source modification. In addition, the source indicated that the stack test time frame listed in Condition C.8 - Performance Testing is also within 180 days after initial start up.

Response to Comment 1:

In order to be consistent with Condition C.8, IDEM, OAQ has made the following changes to Condition D.1.5 as the result of this comment:

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to SSM #157-11449-00033, issued on August 16, 2000, within 60 days after ~~the~~ **achieving maximum production rate, but not later than 180 days after** the initial start up of pellet cooler LA-63, the Permittee shall perform PM testing for pellet cooler LA-63 utilizing EPA

methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

Comment 2:

The source requested to reduce the visible emission notation frequency from once per shift to once per day because it is not possible to conduct visible emission notation during the second shift in the winter months. The source believes that the daily visible emission monitoring is more than sufficient to maintain compliance with PM emission limits.

Response to Comment 2:

The baghouses and cyclones in this modification are mainly used to control PM emissions, operate at a temperature less than 120EF, and the performance of the these control devices are more subject to work practices. Therefore, IDEM, OAQ has agreed to change the visible emission notation frequency for the baghouses (LA-21B, LA-64, and LA-83) and the cyclones (LA-63, LA-79, LA-80, and LA-81) from once per shift to once per day.

However, the visible emission notation frequency for the scrubber (LA-77, stack #54) shall still maintain once per shift. Note that visible emission notation is only required during normal daylight operations. Therefore, the source may only perform the visible emission notation for the scrubber once per day during the winter months.

In addition, failure to take reasonable response steps is considered a deviation from the permit, not a violation. Therefore, Conditions D.1.6 and D.1.14 have been revised as follows to reflect these changes:

D.1.6 Visible Emissions Notations

(a) Visible emission notations of stack exhausts from stacks #9, #42, #43, ~~#54~~, #58 through #60 and #62 shall be performed once per **day** ~~shift~~ during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of stack exhaust from stack #54 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(~~b~~**c**) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(~~c~~**d**) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(~~d~~**e**) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(~~e~~**f**) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a **deviation from**~~violation of~~ this permit.

D.1.14 Record Keeping Requirements

(a) To document compliance with Condition D.1.6**(a)**, the Permittee shall maintain once per ~~shift~~**day** records of visible emission notations of the stack exhausts from stacks #42, #43, ~~#54~~, #58 through #62.

(b) To document compliance with Condition D.1.6(b), the Permittee shall maintain once per shift records of visible emission notations of the stack exhaust from stack #54.

. . . . .

Comment 3:

The source requested to remove the pressure drop monitoring conditions for baghouses LA-21B and LA-83 in Condition D.1.7(a) due to the following technical reasons:

(a) If static pressure drop gauges are installed on bagfilters which have high inlet loadings, the taps to the gauges may plug with feed making the instrument unavailable to measure the pressure drop.

(b) Many of the baghouses are located outdoors far above ground level and the locations are not easily accessible. The source has concerns about safety issues for checking the pressure drop reading periodically.

(c) It is very likely that a baghouse could be operating within the specified pressure drop range and not be in full compliance with the allowable emission limits. It is the source's experience the pressure drop range changes could be negligible when visible emissions exceed normal and some of the bags become damaged.

The source stated that monitoring the visible emission notations from the baghouses is the most accurate method to determine that the baghouses are operating normally, as the material processed is a highly visible substance.

The source also questioned the proper pressure drop ranges listed in the draft permit and indicated that the stack testing for each baghouse is expensive and that the source will not be able to operate these units at the maximum production capacities.

Response to Comment 3:

Baghouses LA-21B and LA-83 are mainly used to control PM emissions, and operate at a temperature less than 120EF. Since the PM emissions may plug up the pressure drop gauges for baghoues LA-21B and LA-83, IDEM, OAQ has agreed to remove the pressure drop monitoring requirements for baghoues LA-21B and LA-83. Therefore, Conditions D.1.7, D.1.14(b), and D.1.14(c) have been revised as follows:

D.1.7 Parametric Monitoring

~~(a) The Permittee shall record the total static pressure drop across the baghouses LA-21B and LA-83 at least once per shift when the gluten loadout bin and the feed dump aspiration system are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 3.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is~~

~~not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.~~

(~~b~~**a**) The Permittee shall monitor and record the pressure drop and flow rate of the scrubber LA-77, at least once per shift when the associated hammermill aspiration system is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 1.5 and 3.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of the scrubber is less than the normal minimum of 25 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a ~~violation of~~ **deviation from** this permit.

(~~c~~**b**) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or at a frequency recommended by the manufacturer.

D.1.14 Record Keeping Requirements

. . . . . .

~~(b) To document compliance with Condition D.1.7(a), the Permittee shall maintain once per shift records of the total pressure drop across baghouses LA-21B and LA-83.~~

(c) To document compliance with Condition D.1.7(**a**~~b~~), the Permittee shall maintain once per shift records of the following parameters across scrubber LA-77:

. . . . .

Comment 4:

The source requested to remove the pressure drop monitoring conditions for scrubber LA-77 in Condition D.1.7(b). The source indicated that the pressure drop monitoring was not required for this unit in SSM #157-11449-00033, issued on August 16, 2000. The source stated that the visible emission notation and the flow rate monitoring are more than sufficient to demonstrate continuous compliance for the emissions from this scrubber.

Response to Comment 4:

IDEM, OAQ periodically revises the monitoring requirements for control devices to provide better indication of compliance. IDEM, OAQ believes that both the pressure drop and flow rate are important parameters to indicate whether scrubber LA-77 is operating properly and maintains a efficiency of 90%. Therefore, no change has been made as a result of this comment.

Comment 5:

The source requested a revision to the cyclone inspection frequency in Condition D.1.8 from quarterly to annually. The source indicated that the cyclone inspection frequency for pellet cooler

cyclones was listed as annually in SSM #157-11449-00033, issued on August 16, 2000. The source also indicated that these cyclones have a high on-stream time and the interruption of operation could mean a substantial business loss.

Response to Comment 5:

Since the cyclones in this modification (LA-63, LA-79, LA-80, and LA-81) are used to control PM emissions mainly, and operate at a temperature less than 120EF, IDEM, OAQ has agreed to revise the cyclone inspection frequency from quarterly to annually. These inspections shall be performed at least six (6) months apart. In addition, inspections shall be performed whenever the respective cyclone is out of service for more than 24 consecutive hours. Therefore, Condition D.1.8 has been revised as follows:

D.1.8 Cyclone Inspections

(a) An inspection shall be performed ~~each calendar quarter of~~**at least once per year for** all cyclones controlling the pellet coolers (LA-63, LA-79, LA-80, and LA-81). Inspections required by this condition shall ~~not~~ be **at least six (6) months apart** ~~performed in consecutive months~~.

(b) Inspections shall also be performed whenever the respective cyclone is out of service for more than 24 consecutive hours.

Comment 6:

The source requested a revision to the baghouse inspection frequency in Condition D.1.10 to be annually, instead of quarterly. The source stated that the annual baghouse inspection and the daily visible emission notation is more than adequate to ensure the proper operation of the baghouses. In addition, the source also requested the phrase “the fine bin transfer line” be removed from Condition D.1.10 because this line has been removed from the permit application.

Response to Comment 6:

Since the baghouses in this modification (LA-21B, LA-64, and LA-83) are mainly used to control PM emissions, and operate at a temperature less than 120EF, IDEM, OAQ has agreed to revise the baghouse inspection frequency from quarterly to annually. These inspections shall be performed at least six (6) months apart. In addition, inspections shall be performed whenever the respective baghouse is out of service for more than 24 consecutive hours. Therefore, Condition D.1.10 has been revised as follows:

D.1.10 Baghouse Inspections

(a) An inspection shall be performed ~~each calendar quarter of~~**at least once per year for** all bags controlling the gluten loadout bin, the pellet storage bin, ~~the fine bin transfer line,~~ and the feed dump aspiration (LA-21B, LA-64, and LA-83). Inspections required by this condition shall ~~not~~ be performed **at least six (6) months apart** ~~in consecutive months~~. All defective bags shall be replaced.

(b) Inspections shall also be performed whenever the respective baghouse is out of service for more than 24 consecutive hours. All defective bags shall be replaced.

Comment 7:

The source requested a revision to the scrubber inspection frequency in Condition D.1.12 to be annually, instead of quarterly. The source indicated that the scrubber inspection frequency for the

existing scrubber LA-77 was listed as annually in SSM #157-11449-00033, issued on August 16, 2000. The source stated that the annual scrubber inspection, the daily visible emission notation, and the flow rate monitoring are more than adequate to ensure the proper operation of this scrubber.

Response to Comment 7:

IDEM, OAQ periodically revises the monitoring requirements for control devices to provide better indication of compliance. IDEM, OAQ believes that quarterly inspection is the proper inspection frequency for scrubbers. Therefore, no change has been made as a result of this comment.

Comment 8:

The commenter opposed the issuance of this permit based on the following reasons:

(a) The commenter stated that the they would lose ground and the time that got them where they are now.

(b) More people would get sick and die.

(c) This source still smells bad.

Response to Comment 8:

Local, State, and Federal air rules are designed to protect general public health. Permit applicants are required to comply with all of the technical and health-based standards established by these laws. This modification will result in an increase of particulate emissions from this source. There is no direct evidence that indicates that the particulate substances emitted from the feed pelleting operation at this source have significant impact on human health. Therefore, IDEM, OAQ has no authority to deny an air permit based on potential health concerns that is not addressed in any air regulations.

In addition, there are no local, state, or federal rules relative to air permits which address odors. Therefore, IDEM, OAQ has no authority to regulate odors emitted from this source. However, communities may adopt and implement local standards that are more stringent than state and federal rules. A.E. Staley has installed a carbon adsorption system to control odors from the waste water treatment plant. Citizens can also call A.E. Staley at (765) 477-5252 at anytime and A.E. Staley's representative will do an onsite evaluation of the complaint and check to determine if some abnormal operating condition is the cause of the odor. Citizens can also contact OAQ Inspector Ms. Wanda Stanfield at (317) 233-6864 for any abnormal situations.

No changes have been made as a result of this comment.

Upon further review, IDEM, OAQ has made the following corrections:

1. The control device ID for the pellet storage bin should be LA-64. Therefore, Condition D.1.2 has been revised as follows:

D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the units in this modification shall be limited to less than the emission limits listed in the table below:

Unit	Unit ID	*Process Weight Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Gluten Loadout Baghouse	LA-21B	Greater than 6,000	8.56
Combo Pellet Cooler	LA-63	Greater than 22,000	20.4
Pellet Storage	LA-~~74~~**64**	Greater than 5,000	7.58
Hammermill Aspiration Operation	LA-77	Greater than 31,000	25.7
Pellet Cooler #1	LA-79	Greater than 11,000	12.8
Pellet Cooler #4	LA-80	Greater than 11,000	12.8
Pellet Cooler #5	LA-81	Greater than 11,000	12.8
Feed Dump Aspiration System	LA-83	Greater than 50,000	35.4

*Note: The actual maximum process weight rate information for these units is confidential. The source agreed to accept the particulate emission limits calculated using the alternative process weight rates listed in the table above, which are lower than the actual process weight rates of these units.

2. Failure to take reasonable response steps is considered a deviation from the permit, not a violation. Therefore, Condition D.1.9 and D.1.13 have been revised as follows:

D.1.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation of~~**deviation from** this permit.

D.1.13 Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a ~~violation of~~**deviation from** this permit.

3. Condition D.1.11 has been revised as follows to instruct the steps that the source shall follow when the failed bags will be repaired or replaced in more than 10 days after the failure is observed.

D.1.11 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section C - Emergency Provisions).~~

Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a ~~violation of~~**deviation from** this permit. **If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

issued December 5, 2003
Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	A.E. Staley Manufacturing Company - South Plant
Source Location:	3300 U.S. 52 South, Lafayette, Indiana 47905
County:	Tippecanoe
SIC Code:	2046
Operation Permit No.:	157-6008-00033
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	157-16882-00033
Permit Reviewer:	ERG/YC

History

On March 6, 2003, A.E. Staley Manufacturing Company - South Plant submitted an application to the OAQ requesting to expand the existing corn gluten feed pellet operation at this source. A.E. Staley Manufacturing Company - South Plant is an existing corn wet milling facility and is a PSD major source. This modification will not result in debottlenecking of the existing corn grind facilities and will not result in increased utilization of the existing units which are not included in this modification. The source submitted their Title V permit application on May 31, 1996. The Title V permit (T157-6008-00033) is currently being drafted and has not been issued yet.

Explanation of Modification

This expansion of the existing corn gluten feed pellet operation includes the following modifications:

(a) The construction and operation of the following emission units:

(1) Three (3) pellet coolers, identified as coolers #1, #4, and #5, constructed in 2004, controlled by cyclones LA-79, LA-80, LA-81, and exhausting through stacks #58, #59, and #60, respectively.

(2) One (1) feed dump aspiration system, constructed in 2004, controlled by baghouse LA-83, and exhausting through stack #62

(3) One (1) gluten loadout baghouse, identified as LA-21B, constructed in 2004, controlling the emissions from the existing gluten loadout bin, and exhausting through stack #9. This gluten loadout bin is also controlled by an existing baghouse, which has been re-designated as “gluten bin baghouse LA-21A” and exhausts through stack #10.

The source also proposed the PM/PM10 emission limits in the table below for these units:

Control Unit ID	Proposed PM/PM10 Emission Limit (lbs/hr)	Proposed PM/PM10 Emission Limit (tons/yr)
LA-21B	0.26	1.13
LA-79	1.71	7.51
LA-80	1.71	7.51
LA-81	1.71	7.51
LA-83	1.03	4.51
Total		28.2

Therefore, for PSD review purposes, the total potential to emit PM/PM10 of the proposed new units is 28.2 tons/yr.

(b) Revising the emission limits for the following existing units:

(1) One (1) combo pellet cooler (was pellet cooler #2 before), constructed in 1999, controlled by cyclone LA-63, and exhausting through stack #42.

This unit was permitted to constructed in SSM #157-11449-00033, issued on August 16, 2000. The particulate emissions from this unit were limited to less than 43.6 lbs/hr, pursuant to 326 IAC 6-3-2 (Process Operations). The source requested to revise the PM and PM10 emission limits for this unit to less than 3.00 lbs/hr. In addition, this unit was required to perform PM testing to demonstrate compliance with 326 IAC 6-3-2 in SSM # 157-11449-00033, issued on August 16, 2000, and the source has not yet performed this test. Therefore, this testing requirement will be included in this SSM as well.

(2) One (1) pellet storage bin, constructed in 1995, controlled by an integral baghouse LA-64, and exhausting through stack #43.

This unit was permitted to constructed in CP #157-3581-00033, issued on February 27, 1995. There was no specific particulate emission limit established for this unit. The source proposed to limit the PM/PM10 emissions from this unit to less than 1.29 lbs/hr in this source modification permit.

(3) One (1) hammermill aspiration operation, constructed in 2000, controlled by web scrubber LA-77, and exhausting through stack #54.

This unit was permitted to constructed in SSM #157-11449-00033, issued on August 16, 2000. The particulate emissions from this unit were limited to less than 46.7 lbs/hr, pursuant to 326 IAC 6-3-2 (Process Operations). The source requested to revise the PM and PM10 emission limits for this unit to less than 1.03 lbs/hr.

The changes of emissions for these units are listed in the table below:

Unit ID	*Actual PM/PM10 Emissions (tons/yr)	Proposed PM/PM10 Emission Limit (lbs/hr)	Proposed PM/PM10 Emission Limit (tons/yr)
LA-63	9.97	3.00	13.1
LA-64	2.32	1.29	5.65

Unit ID	*Actual PM/PM10 Emissions (tons/yr)	Proposed PM/PM10 Emission Limit (lbs/hr)	Proposed PM/PM10 Emission Limit (tons/yr)
LA-77	1.82	1.03	4.51
Total	14.1		23.3

*Note: The actual emissions are based on the actual emission data from January 2001 to January 2003. This information is provided by the source.

Therefore, for PSD review purposes, the potential to emit PM/PM10 of the modified units is 9.20 tons/yr (= 23.3 tons/yr - 14.1 tons/yr).

(c) The removal of the following existing emission units:

(1) One (1) feed conveyor to storage bin, identified as LA-19.

(2) One (1) fiber conveyor to storage bin, identified as LA-20

(3) One (1) gluten loadout airveyor, identified as LA-23.

(4) One (1) gluten loadout aspiration, identified as LA-24.

(5) One (1) old pellet cooler #1, identified as LA-49.

(6) One (1) pellet vacuum system, identified as LA-59.

The changes of emissions for these units are listed in the table below:

Unit ID	*Actual PM/PM10 Emissions (tons/yr)	Proposed PM/PM10 Emission Limit (tons/yr)
LA-19	2.32	0.00
LA-20	1.14	0.00
LA-23	1.54	0.00
LA-24	1.80	0.00
LA-49	9.97	0.00
LA-59	0.09	0.00
Total	16.9	0.00

*Note: The actual emissions are based on the actual emission data from January 2001 to January 2003. This information is provided by the source.

Therefore, for PSD review purposes, the potential to emit PM/PM10 of the removed units is negative 16.9 tons/yr (= 0.0 tons/yr - 16.9 tons/yr).

[Note: The maximum throughput rate information for the modified and the proposed new units is treated as confidential information.]

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the baghouses LA-64 be considered as an integral part of the existing pellet storage bin and the proposed fines bin transfer line, respectively.

(a) Baghouse LA-64 is used for a pneumatic conveyor system and is used to separate the pellet feeds from the air flow.

(b) If baghouse LA-64 malfunctions, the conveying process would be stopped because significant amount of product would be lost.

IDEM, OAQ has evaluated the justifications and agreed that baghouse LA-64 will be considered as an integral part of the existing pellet storage bin. Therefore, the permitting level will be determined using the potential to emit after the baghouse for this unit. Operating conditions in the proposed permit will specify that baghouse LA-64 shall operate at all times when the pellet storage bin is in operation.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Dimensions (feet)	Flow Rate (acfm)	Temperature (EF)
58	LA-79	75	2.0	20,000	120
59	LA-80	75	2.0	20,000	120
60	LA-81	75	2.0	20,000	120
62	LA-83	75	2.5x2.8	12,000	70

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 6, 2003. Additional information was receive on April 30, 2003, July 1, 2003, July 25, 2003, and August 21, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 8).

Potential To Emit of the Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1,043
PM-10	1,043
SO_2	--
VOC	--
CO	--
NO_x	--

Note: Baghouse LA-64 is considered an integral part of the existing pellet storage bin. Therefore, the potential to emit from this unit is the potential to emit after the baghouse.

Justification for the Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4)(A) as the potential to emit PM and PM10 from this modification is each greater than 25 tons per year.

County Attainment Status

The source is located in Tippecanoe County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Tippecanoe County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Tippecanoe County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted towards the determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	378
PM-10	378
SO_2	1,644

Pollutant	Emissions (tons/year)
VOC	451
CO	310
NO_x	589

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is in one of the 28 listed source categories.

(b) These emissions are based upon the actual emissions from the source in 2001.

Potential to Emit of the Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
New Units LA-21B, LA-79 through LA-81, and LA-83	Less than 28.2	Less than 28.2	-	-	-	-	-
Modified Units LA-63, LA-64, and LA-77	Less than 9.20	Less than 9.20	-	-	-	-	-
Total PTE of this Modification (2003)	Less than 37.4	Less than 37.4	-	-	-	-	-
*Contemporaneous Increase (1998-2003)	16.6	16.6	-	-	-	-	-
**Contemporaneous Decreases (1998-2003)	-51.3	-51.3	-	-	-	-	-
Net PTE Increase	Less than 2.7	Less than 2.7	-	-	-	-	-
PSD Significant Thresholds	25	15	40	40	100	40	NA

Note: (*) This is from the TSD for SSM#157-11449-00033, issued on August 16, 2000.
(**) Contemporaneous decreases include 16.9 tons/yr from units removed as part of this modification [= (17.3 tons/yr in 2001 + 16.5 tons/yr in 2002)/2], 31.9 tons/yr in 2000 [= (31.2 tons/yr in 1998 and 32.6 tons/yr in 1999)/2], and 2.5 tons/yr in 1999 [= (2.58 tons/yr in 1997 + 2.42 tons/yr in 1998)/2]. The contemporaneous information before this modification is from the TSD for SSM#157-11449-00033, issued on August 16, 2000.

This modification to an existing major stationary source is not major because the net emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. The netting analysis was performed considering the emission changes from August 1998 to August 2003.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this modification.

(b) This source does not have a grain storage elevator with a permanent storage capacity of greater than 1 million bushes. Therefore, the requirements of the New Source Performance Standards for Grain Elevators (40 CFR 60.300 - 60.304, Subpart DD) are not applicable to this modification.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.

(d) This modification does involve a pollutant-specific emissions unit:

(1) with the potential to emit before controls equal to or greater than one hundred (100) tons per year, and

(2) that is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the units LA-63, LA-79 through LA-81, and LA-83 in this modification are subject to 40 CFR Part 64 - Compliance Assurance Monitoring (CAM). Since the source's Part 70 permit application was filed and determined complete before April 20, 1998, the CAM plan for these unit shall be submitted with the first Part 70 permit renewal application and the CAM requirements will be included in the first Part 70 renewal permit.

State Rule Applicability - LA-21B, LA-63, LA-64, LA-77, LA-79 through LA-81, and LA-83

326 IAC 2-2 (Prevention of Significant Deterioration)

The existing source is a PSD major source and is in one of the 28 source categories. The potential to emit before control from this modification is greater than 15 tons/yr for PM10 and greater than 25 tons/yr for PM. In order for this modification to be considered minor, the Permittee shall comply with the following requirements:

(a) The PM and PM10 emissions from units LA-21B, LA-63, LA-64, LA-77, LA-79 through LA-81, and LA-83 shall not exceed the emissions limits listed in the table below:

Unit ID	PM10 Emission Limit (lbs/hr)	PM Emission Limit (lbs/hr)
LA-21B	0.26	0.26
LA-63	3.00	3.00
LA-64	1.29	1.29
LA-77	1.03	1.03
LA-79	1.71	1.71
LA-80	1.71	1.71
LA-81	1.71	1.71
LA-83	1.03	1.03

(b) The Permittee shall remove or shut down units LA-19, LA-20, LA-23, LA-24, LA-49, and LA-59.

This is equivalent to 37.4 tons of PM and PM10 emissions for this modification project. Within the contemporaneous time period (1998-2003), the net emission increase from this modification as the result of PSD netting analysis is less than 15 tons/yr for PM10 and less than 25 tons/yr for PM. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The proposed modification does not have any HAP emissions. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The maximum throughput rate information for each of the proposed and modified units is confidential. The source proposed to comply with 326 IAC 6-3-2 using the alternative process weight rates, which are lower than the actual maximum process weight rates for the proposed and modified units. Particulate emissions from each of the units in this modification shall be limited to the emission limits listed in the table below:

Unit	Unit ID	Process Weight Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Gluten Loadout Baghouse	LA-21B	Greater than 6,000	8.56
Combo Pellet Cooler	LA-63	Greater than 22,000	20.4
Pellet Storage	LA-74	Greater than 5,000	7.58
Hammermill Aspiration Operation	LA-77	Greater than 31,000	25.7
Pellet Cooler #1	LA-79	Greater than 11,000	12.8
Pellet Cooler #4	LA-80	Greater than 11,000	12.8
Pellet Cooler #5	LA-81	Greater than 11,000	12.8
Feed Dump Aspiration System	LA-83	Greater than 50,000	35.4

Th pounds per hour limitations were calculated using the following equations:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

According to the emission calculations (see Appendix A), the potential to emit PM from these units after control is less than the emission limits above. The use of control devices (baghouses and cyclones) ensure comply with these limits. Therefore, these units are in comply with 326 IAC 6-3-2.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The combo pellet cooler, and the pellet cooler #1, #4, #5 have applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the exhaust of cyclone exhaust stacks #42, #58, #59, and #60 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

   (b) An inspection shall be performed each calendar quarter of all cyclones (LA-63, LA-79, LA-80, and LA-81) controlling the combo pellet cooler, and the pellet cooler #3, #4, #5. Inspections shall not be performed in consecutive months. In the event that cyclone failure has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

These monitoring conditions are necessary because cyclones LA-63, LA-79, LA-80, and LA-81, which control emissions from the combo pellet cooler, and the pellet cooler #1, #4, #5, must operate properly to ensure compliance with 326 IAC 2-2 (PSD) and 326 IAC 6-3-2 (Manufacturing Processes).

2. Gluten loadout baghouse (LA-21B), pellet storage bin (LA-64), and feed dump aspiration system (LA-83) have applicable compliance monitoring conditions as specified below:

(a) Visible emissions notations of the exhaust of baghouse exhaust stacks #9, #43, and #62 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) The Permittee shall monitor and record the pressure drop for the baghouses LA-21B and LA-83, at least once per shift when the gluten loadout bin and the feed dump aspiration system are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within 1.0 and 3.0 inches of water, or a range established during the latest compliant stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside the above mention range.

[Note: The pressure drop monitoring is not required for the integral baghouse LA-64.]

(c) An inspection shall be performed each calendar quarter of all bags controlling the gluten loadout bin (LA-21B), the pellet storage bin (LA-64), and the feed dump aspiration system (LA-83). Inspections shall not be performed in consecutive months. All defective bags shall be replaced. All defective bags shall be replaced. In the event that bag failure has been observed:

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit.

(2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

These monitoring conditions are necessary because baghouses, which control emissions from the gluten loadout bin (LA-21B), the pellet storage bin (LA-64), and feed dump

aspiration system (LA-83), must operate properly to ensure compliance with 326 IAC 2-2 (PSD) and 326 IAC 6-3-2 (Manufacturing Processes).

3. The hammermill aspiration system (LA-77) has applicable compliance monitoring conditions as specified below:

(a) Visible emissions notations of the scrubber exhaust from stack #54 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) The Permittee shall monitor and record the pressure drop and flow rate of the scrubber (LA-77) used in conjunction with the hammermill aspiration system, at least once per shift when the associated hammermill aspiration system is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 1.5 to 3.0 inches of water, the flow rate of the scrubbers shall be maintained the normal minimum of 25 gallons per minute, or ranges during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when pressure reading is outside the above mention range, or a flow rate is below the above mentioned minimum is above the above mentioned maximum.

(c) An inspection shall be performed each calendar quarter of the scrubber controlling the hammermill aspiration system. Inspections shall not be performed in consecutive months. In the event that a scrubber malfunction has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

These monitoring conditions are necessary because the scrubber for the hammermill aspiration system (LA-77) must operate properly to ensure compliance with 326 IAC 2-2 (PSD) and 326 IAC 6-3-2 (Manufacturing Processes).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached Significant Source Modification No. 157-16882-00033.

Appendix A: Emission Calculations
PM/PM10 Emissions
From Gluten Loadout Baghouse (LA-21B)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Baghouse LA-21B	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	3,000	acf/m
Control Efficiency:	98.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 3,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**0.26 lbs/hr**
Annual PM/PM10 emissions	= 0.26 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**1.13 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 1.13 tons/yr / (1-98%) =	**56.3 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Combo Pellet Cooler (LA-63)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Cyclone	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	35,000	acf/m
Control Efficiency:	95.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 35,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**3.00 lbs/hr**
Annual PM/PM10 emissions	= 3.00 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**13.14 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 13.14 tons/yr / (1-95%) =	**263 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Pellet Storage Bin (LA-64)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Integral Baghouse LA-64	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	9,200	acf/m
Control Efficiency:	99.9%	

1. Potential to Emit:

Since the baghouse is an integral part of the process, the PTE of the process is determined using the PTE after the baghouse.

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions = 0.01 (gr/acf) x 9,200 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) = **0.79 lbs/hr**

Annual PM/PM10 emissions = 0.79 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) = **3.45 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Hammermill Aspiration Scrubber (LA-77)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Scrubber	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	12,000	acf/m
Control Efficiency:	90.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 12,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**1.03 lbs/hr**
Annual PM/PM10 emissions	= 1.03 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**4.51 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 4.51 tons/yr / (1-90%) =	**45.1 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Pellet Coller #2 (LA-79)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Cyclone	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	20,000	acf/m
Control Efficiency:	95.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 20,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**1.71 lbs/hr**
Annual PM/PM10 emissions	= 1.71 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**7.51 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 7.51 tons/yr / (1-95%) =	**150 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Pellet Coller #4 (LA-80)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Cyclone	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	20,000	acf/m
Control Efficiency:	95.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 20,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**1.71 lbs/hr**
Annual PM/PM10 emissions	= 1.71 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**7.51 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 7.51 tons/yr / (1-95%) =	**150 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Pellet Coller #5 (LA-81)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Cyclone	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	20,000	acf/m
Control Efficiency:	95.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 20,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**1.71 lbs/hr**
Annual PM/PM10 emissions	= 1.71 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**7.51 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 7.51 tons/yr / (1-95%) =	**150 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From Feed Dump Aspiration (LA-83)

Company Name: A. E. Staley Manufacturing Company - South Plant
Address: 3300 U.S. 52 South, Lafayette, IN 47905
SSM: 157-16882-00033
Reviewer: ERG/YC
Date: August 22, 2003

Process Description:

PM Control Equipment:	Baghouse	
Grain Loading:	0.01	grains/acf
Air Flow Rate:	12,000	acf/m
Control Efficiency:	98.0%	

1. Potential to Emit After Control:

Assume all the PM10 emissions equal PM emissions.

Hourly PM/PM10 Emissions	= 0.01 (gr/acf) x 12,000 (acf/min) x 60 (min/hr) x 1/7000 (lb/gr) =	**1.03 lbs/hr**
Annual PM/PM10 emissions	= 2.57 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**4.51 tons/yr**

2. Potential Uncontrolled Emissions:

Potential PM/PM10 emissions	= 2.57 lbs/hr x 8760 hr/yr x 1 ton/2000 lbs / (1-98%) =	**225 tons/yr**